

WHAT IS CLAIMED IS:

1. A video editing system comprising:
  - program segment defining means for dividing a video program into at least one segment;
  - content defining means for defining contents of said at least one segment in accordance with content labels;
  - preference storage means for storing viewer preferences for the content of said at least one segment;
  - player means for playing said at least one segment;
  - processing means for controlling said player means to access those segments of the program consistent with said viewer preferences; and
  - display means for generating a continuous program of said at least one segment consistent with said viewer preferences.

2. The video editing system of claim 1, further comprising:

viewer identification and password control means for accepting and permitting viewer access to said viewer preference means, wherein said viewer preference means provides content structures specific to each said viewer for said at least one said segment.

3. The video editing system of claim 1, further

comprising:

preference application means for permitting the automatic application of said viewer preference structure to at least one of said program segment.

4. The video editing system of claim 1, further comprising:

preference application means for permitting the application of a content preference structure that is program-specific.

5. The video editing system of claim 1, wherein said program segment content defining means further comprises a segment rating means having a variety of content categories and rating levels.

6. The video editing system of claim 5, wherein said content categories include at least one of a form of expression, a subject matter, an element development, an expertise level, a detail level, and a program length.

7. The video editing system of claim 1, further comprising:

at least one of a parallel segment, and an overlapping segment, and a transitional segment for at least one segment;

a segment map logically linking said at least one segment in time-sequential order, and wherein said display processing means further comprises random access segment

retrieval means for retrieving said segments as a continuous program on said display such that said combination of different segments is entirely transparent to a user.

8. The video editing system of claim 1, wherein said content label comprises keywords searchable by terms identified from said viewer preference means.

9. The video editing system of claim 1, further comprising interactive viewer editing means permitting control of segment transmission prior to, during and following said segment display.

10. The video editing system of claim 9, wherein said viewer editing means further comprises modifying means for modifying segment identifications and definitions.

11. The video editing system of claim 9, wherein said instructive viewer editing means further comprises random sequential access means for accessing a specified set of segments to permit a preview of said segments to determine their inclusion in said transmitted program.

12. A program rating system, comprising:

a plurality of content categories and rating levels for each of at least one video program;

assigning means wherein each segment of said at least one program is available to be simultaneously assigned more than one content category with more than one rating; and

searching means for matching those program segments whose preassigned rating are less than or equal to said defined category.

13. The program segment rating system of claim 12, further comprising a program segment content defining means for pre-defining labels for the contents of said programs; and

segment rating means for assigning said content labels to appropriate segments.

14. A cable transmission editing system, comprising:

video program transmission means;

video program retrieval means;

content defining means for defining contents of at least one segment of said program;

preference storage means for storing viewer preferences for the contents of said at least one segment;

player means for reproducing said at least one segment;

processing means for controlling said player means to access those segments of the program consistent with said viewer preferences; and

display means for generating a continuous program of said at least one segment consistent with said viewer

preferences.

15. The cable transmission editing system of claim 14, wherein said transmission means comprises a two-way communication architecture wherein connections between said transmission, retrieval and player means are simultaneously available to each user, whether said user's primary function may be as a program provider, system services provider, or as an end recipient of program services.

16. The cable transmission editing system of claim 14, wherein said program/segment processing means further includes at least one of a program/segment keyword search facility, and a category tree structure search facility, to permit retrieval of at least one program/segment from a plurality of programs.

17. The cable transmission editing system of claim 14, further comprising viewer program preference communication means for facilitating the retrieval and production of a program involving said viewer preferences.

18. The cable transmission editing system of claim 14, wherein said cable transmission system is fiber optic based.

19. The cable transmission editing system of claim 18, wherein said transmission of said program is at least one of real-time/non real-time based.

20. The cable transmission editing system of claim 14, wherein said preference storage means stores said programs in at least one of a fixed media device, a removable media

device, a read-only media device, and a read/write media device, and wherein each said storage device contains at least one of a single segment of said program, a plurality of segments of said program, said program, or a plurality of said programs.

21. A cable based transmission system, comprising:

a program retrieving means wherein said retrieving means comprises program retrieving modules having at least a program transmission device, an audio/video phone, a data communications device, a personal computer emulation device;

integration means for integrating non-program related systems with said program such as security and appliance management and for providing a user with the services pertaining to said non-program systems.

22. A cable based transmission system, comprising:

transmission/receiving means for transmitting and receiving video information;

means for identifying and dividing said transmitted/received video information into at least one segment;

preference determining means for enabling a viewer to define a plurality of preferences for said segment content; and

searching means for searching and comparing said viewer preferences with said contents of said segments.

23. A video program, comprising:

a video program having content information and video information, said content information including program identification and definitions which permit a video viewer to apply video preferences relating to said content information; and

playing means for playing continuously and transparently said program in accordance with said viewer preferences.

24. The video program of claim 23, wherein said identification and definitions are optionally separately assigned to respective audio and video elements of said program.

25. The video program of claim 23, wherein said content information further includes a program/segment rating structure comprising a variety of content categories and rating levels wherein each program is simultaneously assigned more than one content category and rating.

26. The video program of claim 23, wherein said content information includes at least one of the following categories: form of expression, subject matter, element development, expertise level, detail level, and program length.

27. The video program of claim 23, wherein said video program includes at least one of a parallel segment, and an overlapping segment, and a transitional segment.

28. The video program of claim 23, wherein said video program includes a program source that comprises at least one of the following formats: tape format, disk format, and memory device format of at least an electronic, magnetic, and optical format.

29. A video transmitting apparatus incorporating random access technology, comprising:

a physically transportable video program source including a video program, program and segment information, and segment identification information;

a video player device;

a storage means connected to said video player device;

program and segment information and viewer preference structure processing means for generating transmission codes for those segments of the program consistent with viewer preferences; and

transmitting means controlled by said transmission codes for generating a continuous program of only those segments consistent with viewer preferences.

30. The video transmitting apparatus of claim 29, further comprising:

means for transparent continuous transmission of said video information retrieved from said video program

source.

31. The video transmitting apparatus of claim 29, wherein said video player device further includes viewer controls which play, rewind and include stop controls along with segment skipping, segment in, segment out, segment mapping, preference structure access, system access and help features.

32. The video transmitting apparatus of claim 29, further comprising:

a keyboard connector permitting utilization of a personal computer keyboard having cable/infrared linkage facilitating alphanumeric and function key entries.

33. The video transmitting apparatus of claim 29, wherein said storage means includes at least one of a fixed media, a removable media, a read-only media and a read/write media.

34. The video transmitting apparatus of claim 29, further comprising:

viewer identification and password control means for restricting access to said video transmitting apparatus; and

viewer content preference structures specific to each viewer.

35. The video transmitting apparatus of claim 29, further comprising:

viewer content preference structures and viewer content preference structure storage and retrieving means permitting the automatic uniform application of a given structure to at least one of a variety of program sources, programs, and program segments, and the application of a content preference structures that are program specific.

36. The video transmitting apparatus of claim 29, further comprising:

interactive viewer editing means for permitting control of segment transmission prior, during, and following the segment transmission.

37. The video transmitting apparatus of claim 29, further comprising:

viewer editing means having random sequential access of a specified set of segments to permit preview of said segments to determine their inclusion in the transmitted program.

38. The video transmitting apparatus of claim 29, further comprising:

program/segment retrieval means further including a program/segment keyword system and/or a program/segment category tree structure to permit retrieval of programs, segments from a program, and/or segments from a plurality of programs.

39. A video editing system comprising:

program segment defining means for dividing a video program into at least one segment;

player means for playing said at least one segment;

processing means for controlling said player means to access those segments of the program consistent with viewer control commands; and

display means for generating a continuous program of said at least one segment consistent with said viewer control commands.

40. The video transmitting apparatus of claim 39, wherein said viewer control commands including play, rewind, stop, and at least one of segment skipping control, segment in/out control, and segment mapping control.

41. A video retrieval system comprising:

program segment defining means for dividing a video program into at least one segment;

content defining means for defining contents of said at least one segment in accordance with content keywords;

keyword segment retrieving means for retrieving said segments based upon said provided keywords;

player means for playing said at least one segment;

processing means for controlling said player means to access said at least one segment consistent with said

keyword retrieval; and

display means for displaying said at least one segment consistent with said keyword retrieval.

42. A video program editing system comprising:

program segment defining means for dividing a video program into at least one segment and at least one of a parallel segment, overlapping segment, and transitional segment;

content defining means for defining contents of said at least one segment in accordance with content labels;

preference storage means for storing viewer preferences for the content of said at least one segment;

processing means for controlling said player means to access those segments of the program consistent with said viewer preferences; and

a segment map logically linking said at least one segment in time-sequential order;

random access segment retrieval and displaying means for retrieving and displaying said segments on said display means as a continuous program such that said combination of different segments is entirely transparent to a user.

display means for generating a continuous program of said at least one segment consistent with said viewer preferences.

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